Improving Educational Quality (IEQ) Project

FINDINGS FROM AN EXPLORATORY STUDY OF TEACHERS' BELIEFS AND PRACTICES ABOUT PUPIL ASSESSMENT IN MALAWI

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Acronyms

CA	Continuous Assessment
CAF	Continuous Assessment Feasibility
CAFS	Continuous Assessment Feasibility Study
IEQ	Improving Educational Quality
MANEB	Malawi National Examinations Board
MIE	Malawi Institute of Education
MIITEP	Malawi Integrated In-service Teacher Education Programme
MOEST	Ministry of Education, Science, and Technology
PEA	Primary Education Advisors
TALULAR	Teaching and Learning Using Locally Available Resources
TST	Technical Support Team
USAID	United States Agency for International Development

1. Background

Improving the quality of education is an urgent priority for Malawi's citizens, national and local leaders, and development partners. To this end, the Ministry of Education, Science, and Technology (MOEST) participated in the USAID-funded Improving Educational Quality II (IEQ) project from 1997 – 2003. Data collected in the first years of the project raised serious questions about teaching and learning in Standards 3 and 4 of government primary schools. Alarming numbers of pupils were unable to read, write, or perform simple mathematics tasks after spending several years in primary school, and teachers were unable to diagnose the reasons pupils why were performing so poorly (Jesse, Winicki, Mchazime, Kamangera, Dowd, Harris, and Heyman, 2003). Therefore, in 2001 IEQ team members began meeting with representatives of six educational organizations in Malawi to plan an intensive, classroom-based intervention to improve teaching and learning. Motivated by concerns for pupil outcomes in literacy and numeracy and by teachers' inability to assess pupil learning, in January 2002 this group of education stakeholders[1] launched a Continuous Assessment Feasibility study (CAFS) in 21 primary schools in Malawi's Ntcheu district.

The CAFS sought to explore ways in which Standard 3 teachers could assess individual pupil learning in three subjects: mathematics, English, and Chichewa. In this approach to continuous assessment, teachers use locally-available materials to make learning materials which they can also use to assess pupil learning. Following individual assessment of pupils, teachers record pupil progress on a simple "rainbow" chart where the colors of the rainbow are assigned to literacy and numeracy skills of increasing complexity from the Standard 3 curriculum. As pupils master a particular category of skill development and can demonstrate their mastery by performing a particular task, they chart their progress by moving a happy-face marker into the next color level on the chart. If pupils are not able to perform 18 out of 20 tasks correctly in a particular area, the teacher tells them to work with related manipulative learning materials in the classroom in order to increase their understanding, and to return at another time to be assessed in the same level. Teachers also record this information in a notebook and, more importantly, they then use the assessment information to inform and improve their classroom instruction. They also use this assessment information to assign remedial or enrichment activities to pupils in the context of classroom instruction and beyond (duPlessis, 2003).

The CAFS varies radically from most assessment models in Malawi and much of sub-Saharan Africa that rely heavily on terminal examinations to assess pupils and that depend, for continuous assessment, on "continuous testing." In these more pervasive models, teachers prepare and administer tests on a somewhat regular basis in order to find out what pupils know and do not know. Pupils' marks or

[1] Participating organizations included the Domasi College of Education, the Malawi Institute of Education (MIE), the Malawi National Examinations Board (MANEB), the Ministry of Education, the Ntcheu District Education Office, St. Joseph Teacher Training College, and SAVE the Children Federation-US.

scores on these examinations are combined and averaged, they are assigned a rank or position in the class, and they are promoted or retained based on these marks.

That these practices continue year after year is not surprising. Teachers are constrained by tradition, large classes, limited resources, and their own training. In Malawi, assigning pupils a rank or position in class beginning in primary Standard One is a strong tradition, an expected outcome of assessment.[2] Primary school classes in Malawi are large,[3] and the competition for resources—sufficient textbooks, pencils and exercise books for pupils, and instructional materials for teachers—throughout the system is fierce. Finally, most teachers in the system have had limited training. The majority of teachers interviewed in this study were either untrained or trained through the Malawi Integrated In-service Teacher Education Program (MIITEP), which does little to inform them of assessment possibilities outside of testing. Four units in the Foundations Studies section of the MIITEP teacher training textbook instruct teachers about tests, and one unit in the English section mentions "testing is a means of assessing pupils" (MIITEP, 955). Other means of assessment are not mentioned in MIITEP textbooks, and Pupil Teacher's Handbooks (i.e., teachers' guides) do not discuss authentic assessments. Teacher training students are taught the purposes of tests and are taught how to construct a good test (MIITEP, 814-831), but they do not learn about assessment that is based in performance in a real or authentic setting appropriate to the subject matter content.

IEQ II/Malawi's model of continuous assessment moves away from a model of continuous testing and toward a model in which teachers learn new ways of assessing pupils. After several months of implementing the CAF study, the continuous assessment model began to show favorable outcomes. Teachers were making assessment materials from locally available items, using them for instruction, and teaching pupils how to make their own learning materials. Girls and boys were learning to read and write, and reported that they liked school much better than in previous years. Parents were showing interest in the continuous assessment process and were contributing to its success by attending meetings and providing resources for teachers to make assessment materials. Not surprisingly, education officials, teacher trainers, and teachers began to ask whether this kind of continuous assessment could be expanded to other grade levels and to other schools in the district and across the country. IEQ team members proposed expanding to a larger pilot project; the MOEST proposed expanding to teacher training institutions and all schools across the country.

In order to begin to understand the implications of what such a massive expansion would entail and the range of needs to be addressed, in July 2002 two teacher trainers, Sandra Schmidt and Enret

[2] For a thorough description and analysis of ranking pupils and its relationship to teaching and learning in Malawi, see Miske, Schmidt, & Santhe, E. (2003). *The relationship of ranking pupils to teaching and learning in Malawi.* Washington, DC: American Institutes for Research.

[3] The average Standard 3 Teacher:Pupil Ratio in this study was 1:66. Class sizes ranged from 41 to 119 pupils per class. The official government ratio is 1:60.

Santhe,[4] commenced a small, related study to gather baseline information from schools around the country. They collected data from 15 schools in three regions, interviewing 112 teachers and scores of other stakeholders about the types of assessment practices currently in place in Malawi's schools and about teachers' beliefs and understandings of these assessments.

2. Research Questions and Methods

Two questions guided Schmidt's and Santhe's research: What beliefs and practices about continuous assessment are currently found in Malawian schools? What do these beliefs and practices imply for expansion if the continuous assessment model is implemented more broadly?

More specifically, the researchers sought to identify: (1) how stakeholders defined "assessment" and "continuous assessment"; (2) which assessment measures teachers use; (3) how teachers prepare and administer assessments; (4) how teachers record and report assessment results; and (5) problems teachers face in assessing pupils.

Since this was an exploratory study, Schmidt and Santhe used qualitative methods: interviews, documentation review, and observation. They wanted to gather information from a diverse sample of schools in order to discover which aspects of assessment were similar and which were different across the country. Hence, the schools in the study were chosen according to regional distribution: five each from the north, south, and centre of Malawi. Two CAFS schools in the south were included in order to compare the understandings and practices of teachers in the CAFS schools with those of teachers who had not been exposed to the study. Urban, rural, and semi-urban schools were included in each of the three regions.

INTERVIEWS

Schmidt and Santhe spent a full day at each school conducting interviews and examining documents. At each school they interviewed the head teacher, a minimum of four teachers (including at least one Standard 3 teacher), a group of parents, and at least one group of pupils[5] from Standards 3 – 8. When possible, they interviewed individual pupils in greater depth. At the 15 schools, Schmidt and Santhe interviewed 112 teachers (four of whom were participating in the CAFS), 14 head teachers (two from the CAFS), 70 parents, and 92 pupils.

[4] Schmidt was a volunteer teacher trainer in Malawi with the International Foundation for Education and Self-Help (IFESH); Santhe is a teacher trainer at St. Joseph's Teacher Training College, Dedza, Malawi.

[5] In Malawi, children studying in primary school are called pupils. The term "students" is used more technically to refer to those studying in upper standards.

In most cases the head teacher determined which teachers, parents, and pupils would be interviewed. Despite researchers' desire to interview a somewhat representative sample of stakeholders, this did not take place. The head teacher usually selected qualified teachers to be interviewed, so about 70% of the teachers Schmidt and Santhe interviewed were qualified, compared to approximately 50% nationwide.[6] The parents interviewed usually were school committee members. On at least two occasions, the parent sample consisted of school committee members who had stopped by the school in the morning and waited to be interviewed. Where possible, researchers used teachers' record books to select pupils in an effort to choose pupils who were at the top, middle, and bottom of their classes, and who had been present for the exams. However, pupils interviewed primarily were from the top of their standard, attended school regularly, and were present at the school on exam days. Despite the relatively homogeneous nature of this sample, the stakeholders who were interviewed described a range of views and practices that provided useful information to contribute to this dialogue about assessment.

All teacher and head teacher interviews began with a request for definitions in order to understand the words and categories teachers commonly used to discuss assessment and continuous assessment. Teachers described their classroom assessment practices in detail along with their beliefs about assessment. Head teachers described their supervisory and training roles as well as their expectations for how, when, and why teachers were expected to use various assessments. Pupils answered questions about classroom assessment practices and the system of assigning class position or rank. Parents' described teachers' assessment practices as they understood them as well as the ways in which they were involved in their children's education.

DOCUMENTARY EVIDENCE

Teachers were asked to provide as many documents as possible that would help researchers understand classroom assessment practices. Schmidt and Santhe examined the following documents looking for specific kinds of information: questionnaire books[7] and examples of assessments (to determine how frequently teachers used the kinds of assessments they had described in the interview and how they created more comprehensive assessments); pupil progress record books (to track pupil progress and look for connections between assessment and teaching); lesson plans and schemes of work (to match learning with assessment; that is, to understand how teachers used information from assessments to create work schemes and lesson plans, and to see if the information gleaned from the assessment was reflected in the following day's lesson or future revision lessons [i.e., assessment results

[6] Malawi EMIS data, 1997.

[7] Questionnaire books are the books in which teachers write their examinations and other tests. Schools do not have copy machines, so teachers wrote tests in the questionnaire books and then printed the test questions on the chalkboard.

used as feedback]); school reports and marked work (for examples of the kinds of feedback teachers gave pupils); and attendance records.

Pupils brought exercise books and examination papers to their interviews. Following the interview, researchers looked at these documents with the pupils in order to: (1) see how teachers marked papers and exercise books; (2) try to link the teacher's assessment with content covered in class; and (3) relate the marks pupils received on exams to comparable work in their exercise books.

OBSERVATIONS

Observations included casual classroom visits (i.e., without a specific observation protocol) and observations of school activities. In one case, Schmidt and Santhe were invited to attend a school-wide assembly where end-of-year marks and positions were read publicly to parents and other community members following pupil poetry recitations and other performances.

CONSTRAINTS ON DATA COLLECTION

Only some of the data researchers had hoped to see were available to them. Some pupils and teachers had left documents at home that researchers had hoped to examine. Few pupils had test scripts or similar materials that would have provided evidence to back up statements made in the interviews. Some pupils had exercise books, which provided some information about content and the ways in which teachers marked exercises. Only a few pupils had exercise books that covered the entire term, making it difficult to gather a complete picture of what pupils had learned during the year and how they had performed on daily exercises. In short, it was challenging to triangulate from different sources within a school.

Matching assessments with content was a good idea but proved difficult. Depending on the subject area, pupils' exercise books usually contained either notes pupils had taken or exercises they had completed in class, but not both. Some pupils provided a weekly test in an exercise book or a terminal exam the teacher had just returned, but the exercise books and test scripts usually were from different dates or subjects. Nevertheless, in the end researchers were able to collect a small sample of tests, exercises, and notes from the same time period and in the same content area, providing a modicum of useful data in this area.

A similar problem existed in tracking pupil progress. Researchers wanted to follow the progress of pupils who had not done well on examinations by evaluating pupils' progress on the daily work they had completed prior to the exam, and by examining the revision work they had done to help them prepare for the exam. However, since exercise books and assessment samples rarely matched, it was difficult to compare a pupil's performance on daily work with her or his performance on tests. Again,

however, researchers were able to gather a few good samples that illustrate the assessment issues and concerns in this area.

Additional constraints Schmidt and Santhe faced in data collection included dealing with the number of school holidays – public holidays and National Education Day events – at the end of the term. Some classes ended early, and some pupils stayed home.

One day per school was adequate to conduct the interviews and the brief observations, and to request appropriate documentation. Clearly, more data could have been collected with more time. For example, observing classes over several days would have given researchers a more complete picture of what goes on in classrooms, including the diverse assessments being administered. Despite these constraints and limitations, researchers gathered a significant amount of qualitative data about assessment practices and stakeholders' beliefs and attitudes toward assessment.

REFLECTIONS ON DATA COLLECTION AND FINDINGS

Interestingly, the challenges the researchers faced in attempting to collect data and the resulting mishmash of evidence they were able to collect mirror the overall findings of the assessment study. That is, upon analyzing the evidence, rather than uncovering a uniform or systematic approach to assessment, they found a jumble, a chaotic assemblage of ideas about and approaches to assessment across the country. Although some commonalities are evident, this image of a "jumble"—a confused or disordered state—of assessment ideas and practices emerges at first subtly and then more overtly in the analysis.

Teachers in all schools assess pupils and use some form of continuous assessment, if only giving tests more frequently than just at the end of the term. All head teachers expect (and local school policies mandate) that teachers will give terminal tests, keep records of pupil test scores, and assign each pupil a position or rank within the class. Methods of reporting test results also are quite similar across schools. All schools maintain records of their most recent terminal tests. Teachers publicly announce the results from these terminal tests at the end of the year. A composite score of the terminal tests is used to assign pupils to a position or class rank at the end of term.

Aside from these features, however, assessment practices and beliefs varied widely. The ways in which teachers and head teachers define assessment, assessment practices used in the schools, the connections people make between learning and assessment, opinions about the benefits and significance of the ranking system, perceived problems with assessment, and teachers' recommendations for reform differed in significant ways. The absence of a discourse about assessment, and the quickly uncovered assumption that "assessment" means "test", indicated that

much remains to be done to integrate a broader understanding and changes in practice of assessment and continuous assessment into Malawi's classrooms.

The researchers' findings are explored and analyzed in this paper according to five themes: (1) definitions of assessment and continuous assessment; (2) assessment measures teachers use and how they prepare them; (3) how teachers record and report assessment results; (4) problems teachers face in assessment; and (5) stakeholders' recommendations related to assessment practices. Reflections on the implications of the findings follow each section.

3. How do Stakeholders Define Assessment?

Researchers asked about assessment in two separate questions to find out how teachers and head teachers understood and differentiated between assessment and continuous assessment. The 112 teachers and 14 head teachers offered 50 different definitions of assessment and 45 definitions of continuous assessment. Each definition was unique in some way, but there also were some similarities, as is indicated in the summary below. (The italicized numbers next to the category indicate the number of teacher responses and head teacher responses respectively.)

Assessment is. . .

- . . .measuring whether pupils have comprehended what has been taught. *10, 2*
- . . .a way of finding out pupils' progress from the beginning of learning to see if pupils have improved. *7, 2*
- . . .a process whereby teacher looks at the performance of pupils. *6, 2*
- . . .a way of evaluating the performance of pupils. *5, 3*
- . . .a way of finding out the strengths and weaknesses of both the teachers and the pupils. *3, 2*
- . . .finding out what pupils know. *4, 0*
- . . .getting feedback from pupils about the learning that is taking place – both what pupils know and what they do not. *3, 0*
- . . .a way of finding out the successes and failures of pupils. *0, 1*

Teachers and head teachers talk about assessment as a process, a way of measuring or finding out something about the child – the child's comprehension, progress, performance, learning, or knowledge. Assessment provides feedback to teachers about pupil learning, and about pupils' strengths and weaknesses.

Teachers from two schools mentioned the performance not only of the pupil but also of the teacher. They said, "By assessing pupils, we can know whether teachers have taught well." The head teacher

from one school specifically noted the connection between assessment and teacher performance. He said,

> It is an activity a teacher is supposed to do in his [sic] class to find out what actually his or her pupils have attained for a specific period of time that he or she has been teaching them in order to evaluate his [sic] performance of the children's performance on particular subjects and topics.

This head teacher understands that assessments are a barometer of pupils' and teachers' performance, and provide information to both teachers and pupils.

CATEGORIES FOR DEFINITIONS OF CONTINUOUS ASSESSMENT

Teachers and head teachers offered 45 definitions of continuous assessment.

> Continuous assessment is. . .
>
> . . .frequently checking the performance of pupils. *10, 8*
> . . .to test pupils with frequency – monthly and terminally, and can be as often as weekly. *8, 2*
> . . .finding out if learning is taking place throughout daily lessons. *8, 2*
> . . .assessing pupils from beginning to end of the course. *4, 0*
> . . .an ongoing process to find out the progress of pupils by doing different activities. *2, 1*

Teachers defined assessment as a process or way of finding out something about the child; they defined continuous as obtaining this information with greater frequency, from the beginning to the end of a course. They indicated that continuous assessment is an ongoing process, where teachers find out about pupil learning by doing different activities throughout daily lessons.

In the 21st century, "continuous assessment" has come to refer to the systematic and authentic methods teachers use regularly and frequently throughout the school year to figure out what pupils know and do not know, and what pupils can and cannot yet do in various areas of the curriculum. Continuous assessment can include written paper and pencil quizzes and tests, but it is expected to be much more than that. Assessment is expected to be authentic, to include tasks that are or are similar to tasks used in everyday life, and to be performance-based—that is, to give pupils opportunities to show how they can apply knowledge and skills learned in school to situations beyond the school walls. For example, if pupils have learned about coins, they are asked to give change as they would in the market. If pupils have learned about measurement, they are asked to measure cloth with a ruler. These tasks contrast markedly with the usual paper-and-pencil tests of factual recall.

A number of teachers referred to "performance" in their definitions; however, teachers and researchers probably were not referring to performance in the same way. One distinguishing feature of an authentic assessment is that it is measured by its format and use in a "real-world" context. When interviewees spoke of performance, however, they referred to pupils' performing or achieving the lesson objectives rather than measuring content in a performance-based way. Whether pupils are able to answer comprehension level questions similar to those the teacher asks at the conclusion of a lesson constitutes performance rather than doing something authentic such as counting money.

Central to performance-based continuous assessment is the understanding that it constitutes part of a feedback loop of teaching and learning. Assessment results tell the teacher not only what the pupil knows and is able to do, but provide information to the teacher on how effectively she or he has taught a topic or a concept. How pupils perform on an assessment enables a teacher to know that she or he has taught something well, and/or suggests ways in which the teacher might teach something differently the next time.

Three teachers specifically used the word "feedback" in their definition of continuous assessment. One CAFS teacher said that assessment is a "way of getting feedback from pupils of what they know and don't know and what they can do on their own." The word "feedback" was used intentionally in training workshops for CAFS teachers, so this teacher's use of the word is to be expected. In response to a later question about different methods of assessment, the reasons teachers gave for why they use different methods of assessment indicated that they do indeed seek feedback from assessment, so although they did not use the word frequently, they understand that the concept is important.

One other phrase several teachers used suggested that they too were making a connection between obtaining and using feedback. Some teachers and head teachers said that continuous assessment is an "ongoing, daily process" that is part of every lesson. They seemed to be separating "assessment" into its component parts, indicating that it is an integral part of the lesson and needs to be part of classroom activity every day. One teacher stated that revisions could be made based on the outcome of this daily work. Another teacher noted that continuous assessment is "evaluating pupils as the lesson is in progress to see how well pupils are following or understanding." When continuous assessment becomes part of the daily process, it can quickly be integrated into the idea of the learning process.

REFLECTIONS ON STAKEHOLDERS' DEFINITIONS

What can be learned from this review of teachers' and head teachers' definitions of assessment and continuous assessment? First, teachers and head teachers agree that assessment involves the teacher doing something to find out what the pupil knows or has learned, and continuous assessment means finding this out more frequently. Beyond these core assumptions there is great diversity, which

suggests that a professional discourse around assessment is lacking. Teachers have not acquired a language for talking about assessment, they have not been exposed to ways of thinking about it differently. The authentic and performance dimensions of assessment, the feedback loop, the relationship of assessment to the world beyond the classroom, all these are missing from the vast majority of teacher definitions. This lack of discourse prevents teachers from questioning the traditions of assessment, e.g., testing and ranking, and precludes any efforts to reform their own teaching or contribute to reform of the system.

4. What Assessment Measures Do Teachers Use?

Researchers asked teachers for specific examples from their lesson plans that indicated the times and ways in which they had assessed pupils during the year in order to have documentary evidence to triangulate with interview data and other information. Few teachers could provide comprehensive lesson plans, because they had either left the lesson plan books at home or had loaned them to another teacher to copy. In the few examples collected, Schmidt and Santhe found several examples of the assessments teachers had used. These included a list of questions asked at the introduction or conclusion of a lesson; a list of page numbers (e.g., from mathematics texts) from which teachers planned to assign exercise or homework questions; and several references to a test being administered during a class period. One teacher had written out the questions for a social studies exercise pupils were going to do in class that day. For all other assessments described, researchers were compelled to rely on the oral testimony of teachers and expect that they were describing actual examples of assessments they had used and not hypothetical assessments they might use.

Teachers gave many examples of ways in which they assess pupils. A list of teachers' assessment practices is shown in Table 1, together with the number of schools in which the practice was mentioned.

Table 1. Methods of continuous assessment teachers used

Method of Assessment	Number of schools
1. Oral questions	15
2. Tests – midterm and terminal	15
3. Tests – weekly and monthly	14
4. Written exercises in class	13
5. Homework (incl. Asking parents questions and experiments)	8
6. Quiz – competition	8
7. Demonstration of practical skills (esp. PE and agriculture)	6
8. Projects and experiments	6
9. Dramatization	4
10. Group discussion questions	3

Several methods on the list require an explanation.

- "Oral exercises" consist of three or four questions posed to pupils at different points of the lesson: as the introduction to find out what pupils already know, during the lesson to measure what pupils are learning, or at the conclusion of the lesson to find out what pupils have learned.

- Tests are separated into two categories. Midterm and terminal tests are given in all subjects, and pupils' marks or scores on these tests constitute the primary means of promotion. Monthly, fortnightly, and weekly tests are what teachers refer to as "more frequent testing." These tests do not fall into a particular pattern; they are administered sporadically. These tests are valued less than midterm and terminal tests.

- Quizzes are competitions held between pupils in one class or between classes. In order to review a topic and possibly prepare for a test, the teacher divides the class into two teams or invites another class to compete against her or his class. The team members are asked questions individually, and the team that answers the most questions correctly wins the competition.

The two methods mentioned in all 15 schools are the traditional methods of midterm and terminal tests and oral questions. Teachers in the majority of schools also mentioned giving tests more frequently and assigning written exercises in class. Half the schools mentioned homework and quiz competitions. Also included with the top 10 assessment methods in a minority of schools are the more creative methods of dramatization, projects, experiments, and demonstrations of practical skills.

Teachers in various schools also mentioned other methods of assessment, such as having pupils prepare a model or a drawing, or compose or sing a song about what they have just learned. One teacher prohibits pupils from speaking Chichewa for a week at a time in order to listen to them converse in English and assess their oral abilities. Another teacher assesses pupils' oral English ability by chatting informally with them outside of class to see if they are able to carry on a conversation in English. In the infant sections one teacher uses gestures to give commands and then observes whether pupils are able to respond. Overall, teachers seem to believe that pupils should be assessed frequently and in a variety of ways, but they have to separate the ideal from their real practices. They admit that they use the creative methods on the list in Table 1 infrequently, if at all, due to limitations of class size, time, and materials.

One Standard 3 teacher gives tests to his pupils and to a group of Standard 2 pupils in the same school to be sure his pupils can outperform the younger ones. Near the end of the term he also gives a test to his pupils and to Standard 3 children at a neighboring school to compare their performance. One teacher especially liked experiments because they enable pupils to see directly the results of their learning. Another teacher preferred projects for assessment because after completing a project the "learning lingers in their minds." Another teacher found inter-school competitions most effective, since pupils are both exposed to the standards that they should try to reach, and find out how good their performance is in the broader education system.

Many teachers use daily written exercises in mathematics and English. Written exercises are popular because the three to five questions usually assigned provide immediate feedback to the teacher and the pupil. As long as pupils have writing materials, written exercises engage all pupils. Written exercises cover only one topic or one lesson, and teachers mark the work as it is completed, so both pupils and teachers know immediately who understands the topic and who does not. If a majority of pupils cannot successfully answer the assigned questions, then the teacher can figure out easily and quickly which concepts need to be corrected, which topics may need to be revised or reviewed, and whether the teacher can move to a new topic. This immediate connection to learning makes written exercises a popular method of assessment. Teachers also believe that written exercises are the most advantageous to the largest number of pupils. In contrast to tests, pupils do not fear written exercises and will try these exercises easily in class.

Other kinds of assessments have other advantages. Oral questions offer immediate feedback, but they involve just a handful of pupils. A teacher does not have the time to ask a series of questions to each individual in a class of 50 – 100 pupils in order to assess them each class period. With oral exercises, the teacher must make a prognosis for the class based upon the responses of a non-representative sample. However, teachers liked oral questions as a method of assessment because they can question pupils every day, and the pupils know immediately from the assessments whether their answers are correct. One teacher pointed out the disadvantage to the questioning method and suggested that group work is more effective, since a majority of pupils are involved, even when the groups are large.

The researchers anticipated or hoped, perhaps naively, that teachers would seek out and use authentic forms of assessment. From the practices listed and modeled by teachers, it is apparent that they rarely are in a position to do this. Nevertheless, whether teachers are aware of it or not, some of the assessment methods they describe are authentic. These include the demonstration of practical skills, debates, drawings and models, conversations, compositions, reading aloud, and storytelling. Assessing individual pupils using these methods requires a significant amount of time and a small number of pupils. Most teachers in Malawi do not have these luxuries.

PUPILS' PERCEPTIONS OF ASSESSMENT

Pupils corroborated what teachers had said about classroom assessment practices. They answer oral questions that teachers ask at the end of a lesson, and they answer written questions on tests, exams, homework, and exercises assigned during class.

Pupils talked about homework as a means of continuous assessment more frequently than their teachers. Pupils in 10 schools complained about being given homework. Teachers in eight schools mentioned that they give homework, but said little more about it. Pupils said that homework assignments in English, mathematics, Chichewa, science, and social studies begin in Standard 3 and become more intense and more regular throughout the senior sections. Teachers assign homework one to five nights a week, and most nights pupils are given homework in only one area. In schools where teachers assign homework, pupils in the upper levels have more homework, but the frequency of homework varies greatly between schools.

HEAD TEACHERS' EXPECTATIONS

When questioned about their expectations for assessment in their respective schools, all head teachers agreed that teachers should give a terminal or end-of-year test; however, the frequency of giving tests and exercises in addition to the terminal test varied from school to school. About half of the head teachers said they expected teachers to give pupils weekly and monthly tests in addition to the terminal tests. Teachers were required to offer monthly and terminal tests in English, mathematics, Chichewa, general or social studies, and science, but they could use their own discretion whether or not to give weekly tests, and they were free to create their own assessment practices and routines. Only one head teacher required teachers to give written exercises in class and homework in the senior sections. Three head teachers extended the realm of assessment beyond academic learning in the classroom to include cleanliness, punctuality, and behavior. Three head teachers stated that giving monthly and terminal tests in all subjects was important, as was giving a weekly test in at least one subject. In general, head teachers expected that teachers also would use written exercises and oral questions as means of assessment, but the frequency of assignments and how these would be used were left to the classroom teacher.

ASSESSMENTS = TESTS

Researchers observed in the course of data collection that teachers and head teachers began to use the word "assessment" in the interviews when they really meant "test," and "continuous assessment" when they meant "continuous and frequent testing." Ten of the 13 head teachers interviewed said that continuous assessment was "giving tests with more frequency than at term end," or "giving some exercise like a test more frequently." Teachers' gave definitions such as, "Continuous assessment means that you assess pupils continuously – maybe weekly or monthly, or terminally."

Schmidt and Santhe initially asked teachers "how they learned what their pupils know or had learned," since they wanted teachers to answer the question without a particular type of assessment (e.g., a test) in mind as a model. In subsequent questions the interviewers replaced the phrase "how they learned. . ." with the word "assessment." By the middle of the study, researchers began to suspect that teachers were thinking "test" whenever they heard the word "assessment." Teachers' responses to questions about the fairness of assessments, how they made assessments, documentation and examples of assessments, and how assessments inform teaching all focused on tests as the means of assessing pupils. Teachers showed researchers their testing or questionnaire books, indicated why they think tests are fair, and described how they prepare tests.

A number of teachers said they prefer tests because, as one teacher said, "you have the background knowledge of what was imparted and how they are catching it." Generally, teachers like the more comprehensive nature of tests, the format that allows them to ask more questions, and the fact that pupils have additional time for reflection. Teachers give tests to find out whether pupils have understood a chunk of information that has been taught. Even the more popular weekly tests often cover more than one topic and definitely cover more than one lesson. Written exercises ask pupils a few questions on a discrete amount of information. Tests are then given as a follow-up, to see whether pupils remember what has been taught and to give them more questions on these topics. Teachers spend more time marking tests; taking this time allows teachers to see which pupils are doing well and which topics pupils understand. Only one teacher said she keeps track of pupils' responses to particular test questions. Other teachers indicated that they are able to get a general sense of the problems areas for pupils while marking the tests, and this provides useful information for their teaching.

Despite their preference for tests as means of assessment, teachers note that preparing and marking tests are cumbersome activities. Marking a 25-question test over the weekend for 60 or 70 pupils in one subject alone takes up a large portion of the teacher's time. Marking tests requires a lot of attention and extra recording if teachers are to take note of the areas where pupils are not successful. Due to this extra burden of gathering feedback, many teachers expressed a preference for written exercises despite the fact that tests are useful instruments of assessment.

PUPILS' ATTITUDES TOWARD TESTS

Teachers said that pupils who do well on tests like them, and pupils who do not perform well do not like tests. Some pupils clap or cheer when the teacher announces there will be a test. Head teachers said that the pomp and ceremony surrounding tests encourage pupils to work hard and to compete, two values they believed should be taught in every school setting.

According to the teachers, the more obvious indication that pupils like tests is that they come to school on test day. Researchers had difficulty documenting this trend, since attendance books and record books were too incomplete to be able to identify any trends of increased pupil attendance on examination and test days. However, by studying the record books, Schmidt and Santhe learned that a relatively small number of pupils sit for terminal exams compared to the number of pupils officially enrolled in a given standard. Table 2 below compares the number of pupils a head teacher said were enrolled in each standard in his school with the number of pupils who actually sat for the end-of-term exam. (Note that without having the complete attendance records, it cannot be known whether pupils' attendance on exam day was significantly higher than on an average test day, or lower than on a regular school day.)

Table 2. Enrollment and Attendance at Terminal Tests for Term 1, 2002, School A

	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Std 7	Std 8
Enrollment	350	326	207	195	187	117	197	175
Terminal 1	n/a	98	69	66	58	55	45	94
Percentage		30%	33%	33.8%	31%	47%	22.8%	53.7%

If the enrollment and attendance numbers are accurate, then only one-third of pupils enrolled in Standards 1 - 5 at this school sat for end-of-term exams. The percentage of pupils is highest for Standard 8, which is to be expected. It is at the end of Standard 8 that the Primary School Leaving Certificate exam is administered, and this is the year of transition to the next level of schooling.

It is important to note that tests are the sole means of promotion for pupils. Hypothetically, a pupil could avoid school every day except exam day, come to school and take the end-of-year exams, pass the exams, and be allowed to proceed to the next standard. It is possible that pupils may attend school on exam day not because they like tests but because they want the opportunity to be promoted.

Teachers know that many pupils do not like tests since they do not come to school in large numbers on exam days. Several teachers raised this as a problem that needs to be addressed when improving assessment. One teacher described "test fever." "They shiver when they hear the word 'test'", the teacher said. Other teachers spoke of pupils who come to school and then run away when they learn

there is going to be a test. The problem is widespread enough that one teacher suggested no advance warning of tests should be given to pupils to prevent them from absenting themselves or running away. While the overall attendance data were insufficient to draw many conclusions, one teacher's statement seems to be the best summary of pupil attitudes toward tests: some pupils come to school on exam days because they want to be promoted, and others stay home because the rewards are not enough to help them overcome their fear.

Pupils themselves spoke more positively about tests. Pupils--even those who do not do well--said that in general they like tests. As stated at the outset, the sample was biased in favor of pupils who perform well on tests and those pupils who were still attending school near the end of the term. These pupils listed a range of reasons they like tests: taking tests gives them an opportunity to show the teacher how intelligent they are; tests make them think; tests give them a chance to perform and do well; and tests give an indication of the progress pupils are making. Most pupils said they like tests, however, because they receive prizes at home or school if they do well, or because tests are the means to promotion.

REFLECTIONS ON ASSESSMENT MEASURES AND PERCEPTIONS

The "jumble" of assessment practices and perceptions begins to emerge as teachers and pupils talk about assessment measures. Teachers usually mean "tests" when they talk about assessments (although they say that ideally they would like to use different assessment methods), and they infrequently mention homework. A number of teachers aspire to give more frequent tests as a form of continuous assessment, but they do not. Pupils talk about the amount of homework they have and apparently perceive it to be a more potent form of assessment than teachers do. Pupils also describe tests in more positive terms than teachers anticipate. Head teachers believe that observing the ritual of test-taking encourages pupils to work hard and to compete, yet teachers observe and data suggest that many pupils stay home or run home from school if the teacher announces that a test will be given.

Teachers did not describe measures they use to discourage test anxiety or "test fever," which raises questions about the whether teachers subscribe to the "no pain, no gain" attitude of learning. Ostensibly this attitude supports the notion of learning as serious work, but research does not support this view as being conducive to learning. In fact, when students anticipate that learning will be painful or difficult and they are operating under high stress, part of the brain puts up barriers that interfere with learning (Capper, 1996).

A critical dimension of the assessment measures described above is that teachers—who have received little to no instruction about assessment in teacher training (if they have attended teacher training) or in-service staff development—are allowed and expected to create their own practices and routines to assess pupil achievement. A pupil is then tested and ranked on these non-standard measures, the

consequences of which may be with the child for life. Since national assessments are not administered in primary school, very little is known about what the child knows and can do until a child gets to the formal high stakes testing at the end of Standard 8. The ways in which the child is assessed or achievement measured are based on teacher-developed, non-standardized measures, which include such subjective measures as cleanliness, punctuality, and behavior. Collectively, these non-standardized assessments become a de facto instrument of social control or management, since children who consistently score poorly on the tests often drop out of school. What appears to be self-selection—and what pupils and parents often perceive to be a child's personal failure—actually is an artifact of a system that is not able to provide quality education for the majority of children and does not yet have sufficient space to receive all pupils into secondary school.

5. How Do Teachers Prepare and Administer Tests?

This section examines how Malawian teachers make tests, the form of assessment on which they rely heavily. Teachers had difficulty rating their test-making abilities, but they were able to describe how they constructed a test. In terms of content covered, tests tend to be cumulative. Ideally, an end-of-week test covers a single topic taught that week. A monthly test includes some of the questions covered on the previous weekly tests. Midterm tests cover material from the first half of the term, and terminal tests encompass all topics covered during the entire term, using questions from earlier tests and changing them slightly. However, an absence of consistency in this progression meant that the occasional end-of-week tests actually would cover not just one topic but a number of topics that had been taught in the three- to eight-week period. Terminal tests included questions from in-class exercises as well as from the occasional weekly tests. At one school, teachers said weekly tests were the best way for the teacher to learn what pupils had learned about different topics, but the teachers also admitted that they were able to give only two weekly tests during the term, if they had given any at all. At another school, one teacher had given seven weekly tests; other teachers had given none. Still another teacher noted that he had given his pupils 10 weekly tests during the term, but his colleagues' silence suggested they had not done the same.

In most cases, teachers have full discretion over the tests they write, but there are a few exceptions. In two districts, Ng'onga and Zolozolo, an examinations board is responsible for overseeing the production of terminal tests. A teacher submits her or his scheme of work to the board, which then forwards the scheme to another teacher who writes the test and gives it back to the board to review. Each teacher writes a terminal test, but not for his or her own class. A similar process takes place in Ekwaiweni for the senior level classes. In Chikhwaza, Thimalala, and Masasa, teachers have the option of working with other teachers when there is more than one stream of a particular standard.

The test development process is slightly different for Standard 8 pupils since they take the Primary School Leaving Certificate Examination in September. They take at least one mock exam to prepare

for this very important exam. These mock tests are made and marked by other teachers at the school or other teachers in the zone. Some schools have examinations board that review the questions for terminal exams, although since the board members are other teachers who are not familiar with the material and who face serious time constraints themselves, the board rarely interferes with the test the classroom teacher has developed.

In an effort to better understand how teachers used their lesson plans to develop tests, Schmidt and Santhe paired up six tests with the content in the lessons preceding the tests. Tables 3, 4, 5, 6 and 7 below summarize the information from this evaluation. The concepts or topics are listed in the left column of each table in the order they were addressed in the lesson plans. In the two columns on the right are descriptions of the questions that were asked on the same topic.

Table 3. School A, Standard 6 Mathematics

Topics	Midterm	Terminal
Equivalent fractions		Equivalent fractions (1)
Proper fractions		
Changing improper fractions	Changing improper fractions (1)	
Add fractions	Add fractions (1)	
Multiply fractions		
Subtract fractions		Subtract fractions (2)
Divide fractions		Divide fractions (2)
Multiply decimals		Multiply decimals (1)
Divide decimals		Divide decimals (1)
	Other topics: Choose a mixed number (1) Choose an improper fraction (1) Least Common Multiple (1)	
		Other topics: Numeration (1), Addition of hundred thousands (1), Subtraction of hundred thousands (1), Word problems adding millions (1), Word problems with multiplication of whole numbers (2), Division of thousands and millions (3), Word problems on division (1)

Table 4. School B, Standard 3 Maths

Topics (from 19/06/02)	Terminal 2 Test
Divide K and t by 7 and 8	Divide K and t by 8
Geometric shapes	Draw shapes
Measurement of length	
Break cm into m and cm	Break cm into m and cm
	Other topics: Arrange numbers in order, add three numbers in hundreds, multiply hundreds by ones, divide 10s by ones, change money to t, multiply money

Table 5. School C, Standard 3 English

Topics (22/4/02 – 10/5/02)	Terminal test
Use phonics to pronounce words	
Write and complete given words	Make new words (2)
Reading comprehension questions	Reading comprehension on story (5)
Write words dictated and punctuate properly	
Test on monkey story	Same questions as this test (5)
Plurals of words	
	Write words from pictures (5) Complete sentences using pictures (5)

Table 6. School D, Standard 6 Maths

Topics in prior two weeks	Week end test
Add fractions*	Add proper fractions and mixed numbers
Fraction practice*	
Add fractions*	
	Other topics: Add large numbers, subtract in hundred thousands, multiply by a two-digit number, divide by a two-digit number, prime factors, HCF, LCM, equivalent fractions, subtract proper fractions, subtract mixed numbers

* No examples are provided of the exercises given to demonstrate the types and varieties of fractions that are being added.

Table 7. School E, Standard 8 Maths

Term 2 Topics	Midterm 2
Multiply and divide money in fractions	
Multiply kg by money	√
Find profit and loss (3 lessons)	
Profit and loss percent	√
Find selling price (2 lessons)	
Commission (3 lessons)	
Decrease money by a percent	√√√√
Word problems on discount (2 lessons)	
Calculate tax	√
Find tax on salary	
Calculate premium (2 lessons)	√
Rate of moving objects (4 lessons)	
Find average speed	√√
Reduce ratio to lowest terms (2 lessons) Increase and decrease ratio Word problems with ratio	√√√√
Ratio	
Bank services	
Enter withdrawals	

Calculate interest	
Cash account	
Bank account	
Distance, percent error	
Multiply measures of 3-5 digits	√
Divide measures of 3-5 digits	
Word problems on length using all operations	
Convert volume to capacity	
Word problems on capacity	
Mass	
	Other topics: Place value, size of fractions, area, circumference, averages, LCM, simplify linear expressions, operations with fractions, Roman numerals, geometric shapes, series, prime numbers, convert fractions to decimals, prime numbers, multiply decimals, perimeter

Other topics: Place value, size of fractions, area, circumference, averages, LCM, simplify linear expressions, operations with fractions, Roman numerals, geometric shapes, series, prime numbers, convert fractions to decimals, prime numbers, multiply decimals, perimeter

Five of the six tests contained a number of questions that were not part of the material covered during the term. The sixth test, a Standard 7 Chichewa test (not shown above), matched lesson content with test content very skillfully.

Table 3 above shows the results of the analysis of a Standard 6 mathematics midterm exam and terminal exam. Most of the content (six out of eight topics) taught during the term was included in the questions that were asked on one of the two tests. However, a large number of questions was not part of the material from the term. Since teachers said that terminal exams cover only the material taught during that term, one of these explanations might apply: either the exam covers material taught prior to this term and these are review questions, or the lesson plans provided were not the only lessons actually taught this term.

The tests in Tables 4, 5, and 6 assess much of the material that was covered. The final test, the Standard 8 mathematics test, is structured differently. In Table 7, the topics covered on this test are listed on the left, and check marks are given for the number of times that concept was tested on the terminal exam. Many topics from the term were not covered, a few received more coverage on the test

than in the classroom, and 16 questions were not addressed in class. If pupils have not been told ahead of time that additional topics will be on the test, this inconsistency between learning and assessments makes it difficult for pupils to judge what to study and to adequately prepare for their exams. Yet the teachers feel confident that the tests they write are fair.

REFLECTIONS ON TEST PREPARATION AND ADMINISTRATION

The test construction process varies from district to district, school to school, or teacher to teacher. In a country such as Malawi, which produces a national curriculum for all teachers to teach and requires all pupils to take an examination on this curriculum at the end of Standard 8 in order to continue on to secondary school, this variation is a concern. It is not an indication of teacher autonomy and creativity, but rather is part of the assessment jumble that can have a deleterious impact on a child's entire academic future.

Teachers deem assessments to be fair if they test material that was taught. Their standard of fairness is to calculate the percentage of pupils who pass a given test. If this percent is small (e.g., much less than 50%), then they conclude that the test was not fair. The teacher must have written questions that were too difficult or covered material that was not yet taught. As long as the tests cover the teaching, they are believed to be fair. Yet the tests are not always fair, and pupils bear the brunt of poorly constructed tests.

6. How Do Teachers Report Assessment Results?

HOW PUPILS' LEARN THE RESULTS OF ASSESSMENTS

Pupils learn the results of assessments in different ways. For written in-class exercises, as soon as pupils have completed them, teachers mark the work with a check or a cross at the top of the page and then return the exercise books to pupils immediately. This process is fast-paced out of necessity; there are many exercise books for a teacher to mark in a short period of time.

Pupils learn about marks on examinations in one of two ways: either privately and individually when teachers return test scripts; or publicly, when teachers announce pupils' test scores (and their corresponding rank or positions) in front of the school and parents at the end-of-term assembly.

Weekly test announcements receive less attention. The teacher either reads the test results aloud in front of the class or posts the results for the class to see. The public component of this system is very important. When researchers first inquired, it appeared as though this was the only way in which pupils were notified of their marks. Schmidt and Santhe learned that test papers were also given to

pupils, but teachers were hesitant to discuss this. From the teachers' perspective, informing pupils about their performance is done most appropriately by comparing them to other pupils. Returning papers back to pupils does not do this successfully, since pupils do not share these papers willingly with their friends. As researchers watched test scripts being handed back in one class, they observed that pupils take the scripts quickly, fold them, and return to their seats to study their marks. The one pupil observed showing his paper to friends appeared astonished that he had scored 0/100 marks. The privacy of this ritual of returning test scripts to individuals lacks the competitive element that the ceremonies of announcing class position provide.

Teachers read scores aloud in an effort to praise those pupils who performed well and to allow those who did not do well to feel sad. This sadness presumably will motivate pupils to work harder, so that their names will be read—or read earlier, if they improve their position—in future ceremonies. The system is consistent with teachers' beliefs that they should encourage their pupils through praise or disappointment. (This practice is discussed in depth in the paper on ranking [Miske, Schmidt, & Santhe, 2003]).

HOW PARENTS ARE INFORMED OF PUPIL PROGRESS

Parents are informed of pupils' progress either publicly or through written reports. Fourteen of the 15 schools hold an end-of-year assembly to which parents are invited. Many of the schools reported that they also hold a similar assembly at the end of each term. Parents gather at the school to see children perform local dances and to hear pupils read poems as examples of the learning taking place in school. Following the performances, each teacher has an opportunity to speak on behalf of her or his class and to announce results from the terminal test. The teacher typically reads the pupils' names in ascending order and announces the total marks each pupil has scored. Parents are expected to learn from this how their children are faring in school. If a teacher perceives there are specific problems in the classroom such as absenteeism or laziness, she or he will mention these as well, in an effort to garner parents' support in dealing with these concerns.

In addition to oral reports, half of the schools provide school reports to parents at the end of the year or the end of each term. Figure 1 shows an example of one such report. These reports provide more information than is available in the public assembly announcements. Parents can see the marks a pupil earned in each subject and can read a comment or two from the teacher about the child's efforts and performance. School reports are expensive for schools to produce; therefore, many schools offer to have teachers write individual reports on exercise book paper at the end of the year, or they arrange to have teachers fill in school report forms supplied by the children. (Information on the percentage of pupils who buy and supply these reports was not available.) School reports are distributed at the end-of-term assembly. Parents who do not attend this ceremony must rely on their children to bring home the reports. Teachers and head teachers doubt that many of these reports make it home. They suspect

that the good school reports make it home, but most of the parents whose children perform well attend the assembly and receive the reports there.

Teachers said they would like to be able to assess each pupil individually, offer individual help, and track progress better, but they do not have time to do this. Class size was the primary reason teachers gave for administering so few weekly tests and for not entering marks of assessments into record books. When teachers were asked why they chose not to record daily exercises, they simply laughed. They wanted to know if researchers understood what it meant to record this many scores. They recognize the value of keeping records just as they recognize the value of other forms of assessment besides tests, but they feel unable to make changes due to class size.

Schmidt and Santhe saw completed school reports at two schools. The comments from one school varied more than remarks from the other school. Teacher comments at one school included these statements: "should work hard in other classes," "should try Standard 8 and work extra hard," "he is good but should avoid rudeness and bad groups," and "keep it up." Teachers at the second school wrote "work hard" or "he/she has passed" on almost all the reports. One pupil whose report said, "work hard," had passed four exams but was absent for the fifth, leaving her less than half the total number of marks. Her teacher wrote nothing in the comments section.

Figure 1. School Report from Zolozolo

ZOLOZOLO EXAMINATION BOARD (ZEBO)

Zolozolo F.P. School, P.O. Box 77, Mzuzu Tel. 332 454

SCHOOL REPORT

Name of Pupil: _____

Class: _____

TERM: _____ 2001 to 20_____

SUBJECT	TOTAL MARKS	MARKS SCORED	TEACHERS REMARKS
ENGLISH			
MATHEMATICS			
CHINYANJA			
SCIENCE/HEALTH			
AGRICULTURE			
SOCIAL STUDIES			
GENERAL STUDIES			
RELIGIOUS EDUCATION			

POSITION IN CLASS _____ TOTAL IN CLASS _____

PASS FAIL

Comments & Conduct: _____

_____

Next term begins: _____ 2001/200 _____

Class Teacher's Signature: _____

HEAD TEACHER'S REMARKS: _____

REFLECTIONS ON REPORTING PROCEDURES

School reports, like the test papers given back to pupils, provide good general information about pupil progress but offer little specific information about pupil learning. Parents do not know if a child's weakness in English is due primarily to problems in reading, writing, or difficulties with spelling. The "comments" section on the school report forms is a place where teachers could provide more information to parents, but typically teachers do not write in this space. While this may be due to class size or to the lack of available information from record and attendance books, the results are that pupils and parents have little specific information about pupils' progress or learning needs.

On daily work, pupils receive checkmarks for correct responses and crosses to indicate errors, with a score marked at the top of the paper. The teacher does not tell pupils where they need to improve or the types of activities that may help them improve. The only two responses they might see are "work harder" or "good." For daily exercises this may be adequate if teachers then make corrections on the chalkboard that pupils can follow. But for examinations that cover multiple topics, useful feedback is lacking. Teachers may correct some problems, but rarely do they give the pupil such advice as to spend more time memorizing multiplication tables or to work on the placement of commas in a sentence. Pupils' written compositions are also marked with a series of checkmarks and crosses rather than specific comments, which often leaves pupils wondering why they only received 10 or 14 out of 20 marks.

When Schmidt and Santhe asked pupils to describe their weaknesses in school, they replied "agriculture" or "English" or the name of the content area in which they had received the lowest test marks, rather than mentioning specific skills such as "multiplication of fractions." Limited feedback from teachers also limits pupils' own learning and development.

7. Problems and Recommendations for Pupil Assessment

ASSESSMENT CHALLENGES

Assessment is not an easy process. Teachers were quick to list the many difficulties they face in trying to assess pupils. These include: class size, learning materials, time constraints, absenteeism and other pupil problems, and issues relating to parents. Table 8 lists the problems in detail, along with the number of schools at which this problem was raised.

Table 8. Problems Teachers Face in Assessing Pupils

Problem	No. of Respondents
Class Size	
Large class sizes; teacher gives few questions because of large classes	8
Materials & Environment	
Lack of writing materials – paper and pens	11
Lack of teacher materials like graph paper	1
The physical environment of the classroom	1
Time issues	
It is time-consuming to mark all the papers	5
It is time-consuming to write the test and put it on the board	4
Insufficient time to cover all the material	1
Pupils need more time than they have to take the test	1
Absenteeism	
Absenteeism on exam day because pupils fear exams	11
Frequent absenteeism or drop out	6
Initiation ceremonies	2
Pupil Problems	
Pupils copy other pupils' work	5
Language problems, especially in English; pupils cannot respond in English	4
Poverty and hunger	2
Pupils fear the teacher; do not answer if called on individually	2
Lack of discipline or pupil laziness	2
Physical disabilities	1
Some pupils cannot read	1
Parents	
Lack of encouragement from parents	2
Teachers	
Changing allocation of teachers	2

The four problems that appear to be of greatest concern based on the number of respondents and the emphasis they received during the interviews are class size, lack of materials, time issues, and absenteeism.

Due to large class sizes, teachers feel limited in the time available for assessment and the types of assessments they can use. As noted above, although the official pupil to teacher ratio is supposed to be 60:1, often more than 100 pupils are in a classroom. Time issues are related to class size: covering all the material and marking all the test papers take more time with a large group of students.

Teachers are also constrained in the types of assessments they can give by the materials they have—or do not have. Not all pupils have the necessary writing materials—pencils, pens, or exercise books—and some pupils do not write exercises or tests because of this. Teachers lament that they have few teaching materials, such as items for science experiments. Teachers cannot print test papers ahead of time since they do not have access to copy machines, so writing the test on the chalkboard and waiting for pupils to copy the test also takes a significant amount of time. The TALULAR (Teaching and Learning Using Locally Available Resources) program that CAFS teachers are using with great success may help teachers develop the teaching and assessment materials that other teachers lack, but as yet not all teachers are well-versed in this project.[8]

Teachers spoke of two different types of pupil absenteeism: (1) pupils who habitually are absent throughout the term, cannot get the assistance they need, and do not tend to show improvement; and (2) pupils who are absent for examinations and therefore are not considered for promotion. One teacher expressed particular concern about the first type. He said the reason he offers weekly tutoring sessions is to help pupils who have scored poorly on terminal exams, but when these pupils absent themselves from school, they miss this opportunity for assistance. With regard to the second category, most pupils who absent themselves from exams fear failure and its repercussions.

Teachers also were concerned about the prevalence of cheating among pupils. Daily work is valued less in some places because pupils so willingly copy work from one another. Teachers were never certain whether the pupil had done the work alone or with friends. During tests, teachers were more hopeful that pupils had completed work individually, but they realized that in crowded classrooms pupils could easily copy from one another. Teachers believe that pupils copy from one another because they are not confident about what they know. Their solutions focused on ways in which to separate pupils to make it more difficult for them to copy. This may ignore the root of the problem; that is, how to help pupils study so that they can feel confident and not be enticed by cheating.

[8] For an explanation of how to use TALULAR in continuous assessment, see Chilora, H., du Plessis, J., Kamingira, Y., Mchazime, H., Miske, S., Phillips, A., and Zembeni, G. (2003). *Continuous assessment for standard 3: A training manual for educators in Malawi.* Malawi Institute of Education and Improving Educational Quality Project: Domasi, Malawi.

TEACHER RECOMMENDATIONS

Teachers and head teachers offered more than 60 recommendations about ways in which to improve assessment and learning. The recommendation mentioned most frequently (nine times) was to "hold orientation seminars and workshops for teachers to learn about assessment." After teachers had answered more than 50 questions about assessment and head teachers more than 25 questions, it is not surprising that the questions had prompted them to realize that they had much to learn about assessment and that seminars and workshops would be a logical way of doing this.

Their other suggestions dealt with assessment in general, pupil promotion, and government policies ranging from "full implementation" of the official teacher:pupil ratio of 1:60 to providing funds for zonal mock exams in Standard 8. They proposed ideas for implementing and changing the curriculum, and suggested that increased parental involvement would be beneficial. They proposed enhanced teacher incentives and training for and supervision of teachers. Their suggestions for improving teaching included varying pedagogical methods and using library books to encourage reading.

Mentioned almost as often as training (seven times) was the distribution of learning materials ("The government should supply learning materials in good time"); parental involvement ("coordination between parents and teachers needs to be encouraged; parents need to be educated about the importance of education"); and adequate teacher incentives ("Good accommodations and salaries for all teachers' promotions based on performance, not interviews").

Other suggestions mentioned three to five times were several statements about testing: "Keep using tests and more of them"; and "Do not allow multiple-choice questions on assessments (i.e., tests)." Several teachers thought that pupils should be assessed often (e.g., three times a term), or have competitions with compositions and other classroom assignments. Developing a uniform promotion and assessment system to use in the country and the school was a concern to some; they recommended abandoning the policy that allows promotion based on children achieving half the marks. "Children must be able to read and write in order to be promoted," they said. Some asserted that children should have to pass all subjects to be promoted.

Concerns about the curriculum and syllabus also surfaced repeatedly. Statements included: "Government should change the present syllabus to make it simpler"; "lower the level of difficulty in Standards 3 and 4"; and "reduce the amount of work in pupils' books."

Issues related to the teaching profession in general were also mentioned in the context of improving learning and assessment. Recommendations included recruiting able teachers, training more teachers, training teachers in a timely manner, and offering better training to those who are teaching.

8. Conclusions

This paper documents what Malawian education stakeholders, especially teachers, believe about and do in assessment. As such, it is part of the international movement to consider seriously the influence of tests and the ways in which they affect teaching and learning (Capper, 1996). Schmidt's and Santhe's findings show how murky the field measurement and assessment is in Malawi, and how diverse the meanings are in an enterprise that has dramatic consequences for children.

The researchers' queries about assessment and continuous assessment in 15 Malawian schools yielded a wealth of information that can inform the primary education system's next steps in strengthening teaching and learning through improved assessment measures. Currently stakeholders define "assessment" and "continuous assessment" in a variety of ways. Their understandings are similar enough to be able to identify common starting points for discussions and training and introduction to a new professional conversation about assessment. To most teachers and head teachers, assessment and continuous assessment equate with testing and continuous testing, and they are primarily about the pupil. This is to be expected, given traditional examination and assessment methods and the absence of discussion of broader assessment methods in formal teacher preparation. As stakeholders themselves noted in their recommendations, training is needed if assessment is to move beyond testing.

A cluster of teachers is aware of the variety of assessment methods available; some have experience in using these methods and are aware of their advantages and disadvantages. In particular, the CAFS teachers have dealt successfully with the constraints of a lack of materials for continuous assessment and teaching, and with concerns about pupils' "test fever" and cheating (Miske, 2003). They also have explored ways of dealing with large class sizes, a challenge with which all Malawian teachers will continue to struggle until the number of pupils per class becomes more manageable.

While teachers in this study report that they feel confident in their test preparation abilities, the issue surfaced in Schmidt's and Santhe's findings about how closely the material taught actually matches with questions teachers include on the tests. If tests are the sole or most highly valued means of pupil assessment, then pupils need to have every opportunity to demonstrate what they know and can do well. "Surprise" items or "trick" questions—whether included intentionally or unintentionally—usually give the advantage to only a few. An alternative is to develop other means of assessing what pupils know and can do besides tests. As the IEQ team has explored in the CAFS, this can enable teachers to deal with enduring problems in new ways.

With regard to how teachers report assessment results, the researchers noted that a simple mark or score on a test paper tells a pupil or parents next to nothing about the skills, knowledge, or attitudes a

child has achieved or needs to strengthen. School reports are one way in which teachers can communicate this information to parents, if specific comments about each pupil are written.

Teachers and head teachers offered scores of recommendations for improving assessment and learning in Malawi. Their suggestions point to the complexity of the issue and the need to address assessment reform systemically (i.e., education policies, teacher training, access to materials) and in face-to-face interactions between teachers and pupils in the classroom, with the support of head teachers, parents, and the community.

In terms of pupil learning and outcomes, it is important that pupils are aware of how their learning is progressing, that they have opportunities to revise material that they do not understand or have not mastered, and that they be challenged to apply and extend their learning into new arenas. Schmidt and Santhe's documentation of the non-standard "jumble" of assessment approaches will make it possible for teacher trainers, MANEB, and others, to work with teachers to develop a more systematic approach to assessment that is anchored in the curriculum and research.

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